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ABSTRACT

The author offers support for viewing the deaf child as a member of a linguistic minority and considers how this situation affects education of the deaf. Deaf persons are discussed in terms of their intellectual abilities, educational achievement, English competence, and the sociolinguistic factors which point to the existence of a deaf community. American Sign Language (ASL) is seen to have its own grammar and to be the native language of the deaf. Use of ASL (rather than the oral approach) is advocated in the education of deaf children, and procedures similar to those used in bilingual educational programs are recommended. (LS)

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# The Deaf Child as a Linguistic Minority

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The problem of educating deaf children can be looked at from two points of view. Traditionally, deaf children have been regarded as a handicapped group, whose inability to hear imposed severe limitations on how they could learn. It cannot be denied that deaf children, compared to hearing children, are in fact handicapped: they lack the ability to hear spoken language.

But there is another way of viewing deaf children: as a linguistic minority, like Mexican-Americans, or Chinese-Americans, or other non-native English speakers. The prelingually deaf child, after all, is not really aware of his "handicap", since he does not know what "normal hearing" is. It is only when he is required to look, perform, behave and achieve like a hearing child that he begins to see himself as "not normal" -- as opposed to merely deaf. For all intents and purposes, however, a deaf child with no other handicaps is "normal", and very comparable in many ways to a minority child whose native language is not English. The catch is that the deaf child's normal modality for language is not auditory and oral, but visual and manual.

This may appear to be a strange way of characterizing the "handicap" of prelingual deafness, but the analogy between deafness and minority cultures holds in more ways than one. First, most prelingually deaf persons do not learn an auditory-vocal language as their native language. Prelingually deaf American children learn English in school, laboriously, as though it were a foreign language (Charrow & Fletcher, 1974), and the English they end up with is usually not the grammatical Standard English that we know (Charrow, 1975a; Wilbur & Quigley, 1975). Second, most prelingually deaf persons do have a native language, and that is American Sign Language -- ASL ( or "Ameslan"; Fant, 1972). Nearly 500,000 deaf people use ASL, making it the third most widely used non-English language in the United States (Spanish, 4½ million; Italian, 631,000). It is estimated that when hearing people who have learned ASL are included, the total number of users is double or triple this figure (O'Rourke, Medina, Thames & Sullivan, 1975). This is in spite of the fact that ASL is not taught in any schools, and its use by teachers and students has been prohibited in many schools (Alterman, 1970). Third, there is a Deaf Community -- a deaf culture -- whose rules for social interaction, behavioral standards, politeness conventions, and

even amusements, are not the same as those of the dominant -- hearing -- culture. The main difference between the Deaf Community, and let us say, the Chicano Community, is that only 10% of its members are born into it, as deaf children of deaf parents. The other 90% become members by learning ASL and by being accepted into the Deaf Community.

All of these factors -- the fact that most deaf children do not learn English as a true native language; their ability to learn ASL as a native language; and the existence of a Deaf Community, to which most prelingually (and many post-lingually) deaf youngsters and adults belong -- have an important bearing on the education and language development of deaf children in North America. We will discuss each of these factors in relation to deaf education. We will emphasize, particularly, the concept of deaf children as a linguistic minority, whose linguistic and cultural rights should be respected, rather than the older view of deaf children as flawed and somehow incomplete hearing children, who must be made to look and act like hearing children.

We will first provide some background into the intellectual capabilities and general educational achievement of prelingually deaf people in America, and then discuss the English competence of deaf children.

Intellectual abilities

Traditionally, deaf persons were thought to be inferior to the hearing population in cognitive abilities (Bereiter & Engelmann, 1966). More recently, however, numerous studies have indicated that prelingually deaf persons are comparable to the hearing population in their range and distribution of intelligence (Mindel & Vernon, 1971), and ability to conceptualize and reason (Furth, 1971). Deaf persons had been thought to be intellectually and cognitively inferior for what seemed to be common-sense reasons. It was thought that (1) most prelingually deaf persons had no language, (2) language was necessary for thought, and therefore (3) most prelingually deaf persons had a "cognitive deficit" -- an inability to think, conceptualize, and reason. However, there are a number of fallacies underlying this chain of reasoning.

First, and most important, there is a general confusion of language with speech. Because people who are born deaf -- or who have become deaf before age two -- cannot hear speech, and have difficulty learning spoken lang-

uage, they were thought to have no language at all. But language is not necessarily speech, as we shall demonstrate in our discussion of sign language; nor is speech necessarily language, as anyone who is acquainted with a parrot knows.

Second, there is the confusion between language and English. This is a confusion which has been observed in areas other than deafness. (Picture, if you will, the nineteenth-century colonial Englishman, or the "ugly American" tourist, in India or Africa, who refuses to learn the "outlandish gibberish" of those "foreign natives", because it is not really language, just grunts -- and anyway, why can't the natives learn a real language, like English?). Languages differ; English is not the only real language in the world. Languages which are not structured in the same way as English are not deficient, or "non-language". We cannot use English as a basis for judging the "grammaticalness" or validity of any other language.

Thus, deaf persons whose speech is poor, or who know little or no English, are not necessarily "language-deficient". If they have a language such as ASL (and most prelingually deaf adolescents and adults do) -- even if it does not look like English or other Indo-European languages -- then they are not languageless. The investigators who used deaf subjects as "languageless" controls in studies of cognitive ability did not, in general, take knowledge of ASL into account, and thereby confounded their experiments. Those who were more careful, and used young deaf subjects, whose competence in ASL was still minimal, demonstrated that the thinking and reasoning processes of deaf children are still very similar to those of hearing children (Furth, 1971; Furth & Youniss, 1971; Youniss, Furth & Ross, 1971).

Educational achievement

Despite the similarity in the intelligence and the cognitive abilities of deaf and hearing persons, the educational attainment of deaf children is far below that of hearing children with similar backgrounds. This is understandable, since prelingually deaf children usually have great difficulty learning English. As almost all education depends on a knowledge of English, this is indeed an unfortunate situation. At this point one might ask, "Why don't deaf children know English? Aren't they taught it in school? Why hasn't someone found better ways of teaching them English?" The problem is not at all simple.

Indeed, deaf children are taught English in school. They are taught it for as many years as they are in school; many take courses in remedial English after high school, as well. In many schools, deaf children are taught English orally, through lipreading, speech lessons and auditory amplification. This method -- "oralism" -- has not been successful in teaching English to the majority of prelingually deaf children, for a number of reasons. For one thing, it takes a certain talent to lipread adequately. There is no proof that deaf children are any more talented at lipreading than hearing children. Furthermore, even the best lipreaders can only "read" about 40% of what a speaker is saying; they fill in the rest from their experience and their knowledge of English, if they can. Second, it is impossible to lipread (or "speechread") English without first knowing the structure (to determine, for example, the probability that a given word will precede or follow another word. Try lipreading a Russian film, knowing only a few Russian words and no Russian grammar). Third, it is impossible to learn English from lipreading alone. There is no indication of word boundaries, certain sound units (phonemes) are invisible, others are indistinguishable from each other (/b/ and /p/, for example); in general, too much information is lost. If this looks like a vicious circle, it probably is, and it helps to explain the many "errors" and non-standard constructions in English that graduates of our finest schools make. (cf. Charrow, 1975a; Quigley, Smith & Wilbur, 1974).

In some other schools, English is taught -- along with all other subjects -- by means of the oral method plus fingerspelling; this is sometimes called the Rochester Method. Words and sentences are spelled out, letter by letter, using the (one-handed) manual alphabet, simultaneously with the spoken word or sentence (Scouten, 1967). This method probably helps somewhat, as it provides more visual input, but it is still heavily dependent on prior knowledge of English, besides being slow and tiring, and thus cannot be considered an ideal instructional medium. (To give yourself an idea of what the Rochester Method is like, have someone read you the previous paragraph letter-by-letter).

In a growing number of schools, various forms of Signed English and Manual English are used along with speech and speechreading in programs of "Total Communication". We are using the term Signed English to refer to the use of ASL signs in English word-order, with occasional fingerspelling for

those items that have no traditional ASL equivalents (e.g., "the", "of"). The term Manual English is used for specially-devised sign systems such as Seeing Essential English, or SEE I (Anthony, 1971), Signing Exact English, or SEE II (Gustason, Pfetzing, Zawolkow & Norris, 1972), Systematic Sign Language, or the Paget Gorman Sign System ( Paget & Gorman, 1969), Linguistics of Visual English, or LOVE (Wampler, 1971), and Manual English (Washington State School for the Deaf, 1972). Such systems often invent their own signs, and attempt to duplicate in signs the entire morphology -- word-formation system -- of English (e.g., there are signs for "-ing", "-ed", "-tion", "-ance/-ence", "a-", "un-", "de-", etc.). Manual English systems (as opposed to Signed English) were devised on the (as yet untested) assumption that because they look like English, they will enable the deaf child to learn English in a more natural manner. (See Charrow, 1975b; Wilbur, 1976, in press; for a discussion of the potential problems involved).

Studies have shown that prelingually deaf children with early manual communication -- ASL or some variety of Signed English -- do consistently better in all school subjects, including English, than comparable deaf children with only oral communication (Vernon & Koh, 1970; Mindel & Vernon, 1971; Brasel & Quigley, 1975).

Nonetheless, the general educational achievement of even those deaf students who are fluent in a manual language is well below that of comparable hearing students (Moores, 1970; Marshall & Quigley, 1970). The situation is similar to that of other minority children who are not educated in their native language.

English competence

Studies of the English language skills of prelingually deaf students have shown many errors -- often called "deafisms" -- present in their English productions, both oral and written (cf. Quigley, Smith & Wilbur, 1974; Wilbur & Quigley, 1975). We have suggested (Charrow, 1975a; Wilbur, 1976) that such errors are not random, but are rule-governed; they might be considered "variable rules", co-existing with English rules. Such rules appear to be based upon incorrect hypotheses about the structure of English, which the deaf child cannot immediately correct because of his limited exposure to, and feedback from, English. Wilbur, Quigley and Montanelli (1975) found that at least one deviant rule decreased significantly with age. In general,

however, few prelingually deaf children end up with full competence in Standard English.

In order to test the hypothesis that prelingually deaf children were learning English as though it were a foreign language, Charrow and Fletcher (1974) gave the Test of English as a Foreign Language (TOEFL) to deaf high-school students of college-entrance age. Although the deaf subjects did not perform as well as foreign college entrants, in general their results more closely resembled those of foreign students than those of native speakers of English.

American Sign Language

There is only one language that prelingually deaf children in America can and do learn as a native language -- without formal instruction, in a relatively short time -- and that is American Sign Language.

ASL is not a universal sign language, as is sometimes thought, nor is it related to the sign language of the Plains Indians. ASL is historically related to French Sign Language (as it was originally brought here from France in the early 19th century by Laurent Clerc), but the two are no longer mutually intelligible (cf. French and Spanish, which are related, but are no longer mutually intelligible).

Until recently, ASL was considered by many educators of the deaf, and by many deaf people themselves, to be "ungrammatical" or even "lacking a grammar". It was also thought to be either very "concrete" (like pointing), or very "conceptual" (raw concepts thrown together, without any syntax); this is contradictory, to say the least. This was because ASL was looked at from the point of view of the structure of English. No language can be judged relative to other languages: syntactic structures which a language appears to "lack" are invariably compensated for in some other way. Furthermore, any language, translated word-for-word into English, looks strange, outlandish and ungrammatical. And yet, traditional observations of ASL do just that: translate ASL sentences, sign-for-word into English, overlooking many features which are crucial to the grammars of sign languages (such meaning-bearing features as directionality, facial expressions, and others).

Within the last fifteen years, however, linguists have begun to study ASL, and have found it to be a true language, with a complex grammatical structure, capable of expressing anything within human experience and

imagination. It is also very different from English. (See Bonvillian, Charrow & Nelson, 1973; and Wilbur, 1976, for a comparison of some of the grammatical features of English and ASL). ASL has grammatical structures undreamed of in English and other spoken languages: it uses the direction of the verb to indicate Agent-Verb-Object and other such relations, and can, in certain circumstances, express two ideas simultaneously -- one with each hand. In addition, ASL inflects certain nouns for time (as "one week ago", "two years hence", in which the number and the past or future indicator are incorporated into the sign for "week" and "year"), and inflects various verbs for habitualness, iteration and certain semantic relationships by means of reduplication (repeating the sign), horizontally sweeping the arm, or rocking the body while signing (Fischer & Gough, in press). There are many other grammatical mechanisms in ASL which have been described by linguists; still others are under investigation.

Studies of both deaf and hearing children of deaf parents have shown that ASL is acquired spontaneously, as a first language, in much the same way that a spoken language is acquired (Bellugi & Klima, 1972; Wilbur & Jones, 1974). Hearing and hard-of-hearing children of deaf parents usually learn ASL and English at the same time, in the same way that hearing bilinguals learn their two languages (Wilbur & Jones, 1974).

Nonetheless, as we mentioned previously, ASL is not used as a medium of instruction in schools for the deaf (except by a very few teachers, unofficially, when they find that students do not understand the spoken word, or the Signed or Manual English). Indeed, relatively few teachers of the deaf know ASL; and those who do are often hampered by their own attitudinal biases against it -- as well as by educational policies that prohibit its use. Such biases and policies have thus far prevented the use of ASL as a medium of instruction in schools for the deaf.

The Deaf Community

In recent years, sociolinguists have begun to study linguistic/cultural minorities in America. With the increase in knowledge about "language communities", there has arisen a greater awareness of the diversity of languages and cultures in America, and the problems faced by linguistic/cultural minorities in the "melting pot". The melting pot aim -- to "Americanize" minorities -- may be admirable from one point of view (after all, one way

to eliminate discrimination is to eliminate any differences). In practice, however, this aim is impractical — if not downright impossible — as well as damaging to the minority cultures involved. "Americanization" has meant loss of identity and cultural pride, rejection of cultural values and the disappearance of entire language groups in the United States. (Indeed, if ASL were not the only possible means of communication for the majority of deaf Americans, it too would probably have been wiped out long ago). When linguists, psychologists, sociologists and educators began to understand these problems, bilingual education programs began to be established, and emphasis began to be placed on cultural pride -- on the diversity of the U.S. population, rather than its uniformity. This was true not only for immigrants, but also for Black people and Native Americans. "Black English", which had been considered "erroneous usage", or "ungrammatical English", gained respectability as a dialect of English (Baratz, 1969), and the concept of "language communities" whose cultures were different from the mainstream American Protestant culture became accepted.

About that time, linguists became interested in ASL (Stokoe, 1960; 1971; McCall, 1965). In their investigations of ASL, they found that deaf signers (the majority of prelingually deaf persons and of those who became deaf in their youth) constitute not merely a linguistic minority, but also a language community (Schein, 1968). Although there are individual deaf communities in various parts of the U.S. and Canada (often near some institution or facility for the deaf, such as Gallaudet College), we can refer to an American "Deaf Community". This is because all the individuals in each deaf community share the same language -- ASL — as well as their common "handicap" of deafness, and similar experiences in various institutions for the deaf and in the outside world. (It should be noted, however, that Black Southern signs are often different from ASL signs, a result of segregation; J. Woodward, personal communication). It is ASL, above all else, which truly defines the Deaf Community. Native signers (deaf children of deaf parents) are automatically members of the Deaf Community, but such persons account for only 10% of the prelingually deaf persons in America. Deaf children of hearing parents become members of the Deaf Community by learning ASL from their peers who know it (although use of ASL may be prohibited in a school, a child who knows it is accorded high status, and it is likely that other students will learn ASL from him). Since very few deaf people can ever become truly "accepted"

members of the hearing world, and because ASL is the only language that most deaf Americans learn spontaneously and use fluently, it is only natural that its users should be drawn together by it, into a language community.

Sociolinguistic studies of ASL and the Deaf Community have shown that there are different social conventions and politeness rules for signers than for speaker/listeners. Baker (1975) has described turn-taking in ASL conversations, and has shown that there are different "signals" for turn-taking in ASL than in English. There are, as well, different conventions regarding eye-contact, and distance between signer and addressee, than among hearing persons in the dominant culture. These and other such rules create some real "cultural" differences between the deaf and hearing communities.

The existence of a deaf culture is evident, too, in the various deaf theater and mime groups in this country (probably the best-known group is the National Theater of the Deaf, in the U.S.). There is also great interest in dance, and in "signed songs", on the stage, and occasionally on television.

Thus, despite what hearing people regard as the "handicap" of deafness, and despite the real problems that deaf children face in learning English and achieving scholastically, deaf people who have been allowed to become fluent in ASL are not to be regarded as a collection of isolated unfortunates. They are a linguistic and cultural minority, with the security of a community, and rights which should be respected.

Recommendations and conclusions

Our focus in this paper has been upon the deaf as an ASL-using community, out of the English-using mainstream. We believe that this focus is necessary, in order to develop reasonable, realistic solutions to the educational problems of prelingually deaf children. Most deaf persons, including deaf children, are not -- and realistically cannot be -- fully participating and benefiting members of the hearing community. There is no way at present to make deaf people hear. Deaf children should thus be accepted for what they are -- deaf -- and what they realistically can become: productive members of a linguistic/cultural minority group, with as much contact as possible with the hearing society. Only when there is such acceptance, can educators begin to tackle the real problems of deaf children in a hearing society.

We have discussed the fact that American Sign Language is the only true native language of deaf children of deaf parents in America, and the only

true first language of most deaf children of hearing parents. The use of Total Communication -- with Signed or Manual English -- is a partial concession to this fact. Educators of the deaf have recently been more willing to admit that it is much easier for prelingually deaf children to learn and use a manual/visual language than an auditory/vocal one. However, deaf students may not in fact be using the Signed or Manual English that their teachers are using. Deaf children use ASL among themselves, and it appears that they modify Signed or Manual English when they learn it, to make it conform more to the ASL that they know (William Stokoe, personal communication). It is normal that they do this, since Signed English and the various Manual Englishes are inventions -- with no native speakers -- which can be used successfully only when one already knows English. Nonetheless, the fiction is maintained that the children fully understand the Signed or Manual English of their teachers, and learn correct English from it.

It might be more realistic, and successful, if procedures similar to the ones used in bilingual education programs for minority children were followed in teaching English to deaf children. Ideally, in the earliest years, deaf children should learn ASL. Once ASL is established as a means of communication, teachers can then use it as a medium of instruction for all subjects, including English -- which can be taught along with speech, speechreading and reading.

Such a program would require that more teachers be fluent in ASL, which would in turn require that biases against ASL be discarded. A first step, then, would be to train more teachers of the deaf to use ASL and understand its structure, and to improve the attitudes of all persons -- deaf and hearing, teacher and student -- toward ASL.

In the meantime, efforts to use any manual/visual language should be encouraged. ASL-users and Signed English-users have been found to perform significantly better than orally-trained students on tests of English and general achievement tests (Brasel & Quigley, 1975). They obviously receive more and earlier language input and practice than the orally-trained children. The educator of the deaf should nonetheless bear in mind that the Signed and Manual English systems described above may not in fact be teaching "straight English" to the children, and he or she should not have overly high expectations of it (Charrow, 1975b; Wilbur, 1976).

As long as deaf children are thought of as "flawed" hearing children,

who should be learning English, but who somehow cannot learn it properly, their chances of learning Standard English and achieving in school are poor. But once deaf children are considered in the same light as other non-English-speaking minority children, with their own language, culture and social conventions, their educational lot and their relations with the hearing world are bound to improve.

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